

PN - JP2000329972 A 20001130
 TI - LIGHT **EMITTING** AND RECEIVING DEVICE, AND SINGLE CORE OPTICAL FIBER BI-DIRECTIONAL COMMUNICATION SYSTEM
 FI - G02B6/42
 PA - YAZAKI CORP
 IN - MATSUSHITA JUNICHI
 AP - JP19990144528 19990525
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 DT - I

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AN - 2001-095981 [11]
 TI - Optical connector for single optical fiber bidirectional communication system, has sleeve embedded with light **emitting diode** transmitting light from receiving module to optical fiber terminal
 AB - JP2000329972 NOVELTY - A light **emitting diode** (36) converts the electrical signal to light signal in an optical fiber (21). A sleeve (26) embedding the light **emitting diode** is configured coaxially to the optical fiber and lies between an optical fiber terminal (21a) and a receiving module (27). The sleeve propagates the light from the light **emitting diode** to the optical fiber terminal.
 - DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for single core type optical fiber bidirectional communication system.
 - USE - For single core type optical fiber bidirectional communication system.
 - ADVANTAGE - Loss of optical power is suppressed since light is propagated by the sleeve connected between the optical fiber terminal and receiving module. Cost reduction, size reduction is possible and reliability is improved as the light **emitting diode** for converting the electric signal to light signal is embedded in the sleeve.
 - DESCRIPTION OF DRAWING(S) - The figure shows the principal portion expanded sectional view of optical connector.
 - Optical fiber 21
 - Optical fiber terminal 21a
 - Sleeve 26
 - Receiving module 27
 - Light **emitting diode** 36
 - (Dwg.3/10)
 IW - OPTICAL CONNECT SINGLE OPTICAL BIDIRECTIONAL COMMUNICATE SYSTEM SLEEVE EMBED LIGHT **EMIT DIODE** TRANSMIT LIGHT RECEIVE MODULE OPTICAL TERMINAL
 PN - JP2000329972 A 20001130 DW200111 G02B6/42 011pp
 IC - G02B6/42
 MC - V07-G10C
 DC - P81 V07
 PA - (YAZA) YAZAKI CORP
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PN - JP2000329972 A 20001130
 TI - LIGHT **EMITTING** AND RECEIVING DEVICE, AND SINGLE CORE OPTICAL FIBER BI-DIRECTIONAL COMMUNICATION SYSTEM
 AB - PROBLEM TO BE SOLVED: To reduce optical power loss as far as possible, also to reduce costs and physical dimensions, and to improve reliability.
 - SOLUTION: A sleeve 26 through which received lights C1, C2 made to exit from a terminal 21a of an optical fiber 21 are propagated is arranged between the terminal 21a of the optical fiber 21 and a receiving module 27 arranged coaxially with the optical fiber 21. The device is configured so that a light **emitting diode** 36 is buried in the sleeve 26, and transmission lights C3 and C4 are propagated to the terminal 21a of the optical fiber 21.
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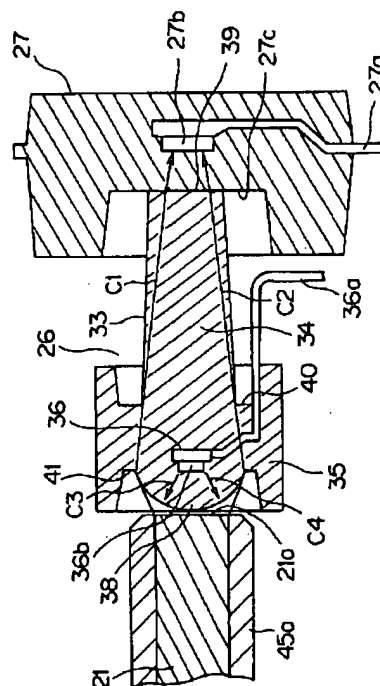
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(54) 【発明の名称】 発光・受光装置、及び、一芯式光ファイバ双方向通信システム

(57) 【要約】

【課題】 光パワーの損失を極力抑えるとともに、コスト低減、小型化、及び信頼性向上を図ることができる発光・受光装置、及び、一芯式光ファイバ双方向通信システムを提供する。

【解決手段】 光ファイバ21の端末21aとその光ファイバ21に対して同軸に配置される受信モジュール27との間に、光ファイバ21の端末21aから出射した受信光C1及びC2が伝搬するスリーブ26を配置している。そのスリーブ26には、発光ダイオード36を埋設しており、光ファイバ21の端末21aに向けて送信光C3及びC4が伝搬するような構成となっている。



PN - JP9005579 A 19970110
 TI - METHOD FOR ADJUSTING OPTICAL AXIS OF OPTICAL COUPLER AND AUXILIARY TOOL THEREFOR
 FI - G01B11/26&Z ; G02B6/42 ; G02B7/00&E ; G02B7/00&F
 PA - OKI ELECTRIC IND CO LTD
 IN - UCHIDA AKIKO; NAKATANI SUSUMU
 AP - JP19950151441 19950619
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AN - 1997-122573 [12]
 TI - Optical axis adjustment method for optical coupler used in optical communication - in which optical axis is adjusted such that maximum amount of light passes through optical axis adjustment assisting part set at end face of fibre bundle
 AB - J09005579 The method involves forming an optical axis adjustment part (12) at the end face of a fibre bundle (10), which is cut at predetermined angle.
 - The optical axis is so adjusted that the amount of light passing through optical axis adjustment assisting part is maximum.
 - ADVANTAGE - Adjusts radiation light from optical coupler at desired angle easily. Realizes optimum coupling efficiency.
 - (Dwg.1/6)
 IW - OPTICAL AXIS ADJUST METHOD OPTICAL COUPLE OPTICAL COMMUNICATE OPTICAL AXIS ADJUST MAXIMUM AMOUNT LIGHT PASS THROUGH OPTICAL AXIS ADJUST ASSIST PART SET END FACE FIBRE BUNDLE
 AW - OPTICAL MODULE
 PN - JP9005579 A 19970110 DW199712 G02B6/42 004pp
 IC - G01B11/26 ; G02B6/42 ; G02B7/00
 MC - S02-A03B4 V07-F01A1B V07-G02 V07-G10C
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 PA - (OKID) OKI ELECTRIC IND CO LTD
 AP - JP19950151441 19950619
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PN - JP9005579 A 19970110
 TI - METHOD FOR ADJUSTING OPTICAL AXIS OF OPTICAL COUPLER AND AUXILIARY TOOL THEREFOR
 AB - PURPOSE: To accurately and easily adjust an emitting angle to a desired angle by adjusting an optical axis so that the quantity of emitted light from an optical coupler may be maximum.
 - CONSTITUTION: An optical axis adjusting auxiliary tool 12 obtained by bundling very thin optical fibers has a columnar outside shape, the base of the auxiliary tool 12 is perpendicular to the axis of the optical fiber, and the perpendicularity thereof is worked with high accuracy. The auxiliary tool 12 is put on a holder 5 and adjusted so that the quantity of the light made incident on a sensor 13 may be maximum. Thus, a light beam emitted from a sensor 4 is adjusted to be parallel with the axis of the optical fiber, that is, the emitting angle is adjusted to be perpendicular to the end face of the holder 5. After adjusting in such a way, a cap 3 and the holder 5 are fixed and further the optical fiber for connection is adjusted and fixed. The optical coupler constituted in such a way shows optimum coupling efficiency and exactly propagates an optical signal to the connected optical fiber.
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